City of Phoenix Downtown Traffic Management System (DTMS)

Presented by:

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Presentation Agenda

- Downtown Traffic Management System Overview
 - > Project Goals
 - > System Components
 - > Future Expansion Plans

About Phoenix

- Population 1.4 million
- 515 square miles
- 5th largest city
- Tremendous growth rate

History

- Major League announcement, 1996
- Sunburst Traffic Management Plan
- Philosophy & Operation

Downtown Phoenix 7th Street S.R. 51 **I-17** Civic Center S.R. 202 **I-10 I-10** Washington Street Jefferson St. Bank One Ballpark I-17

Why a Downtown Traffic Management System?

- Major event facilities:
 - > Bank One Ballpark
 - > America West Arena
 - > Civic Center
- Cultural venues
- Events generate significant circulation & parking demand
- Traffic & enforcement staff will benefit from enhanced technical tools

What are the goals of the DTMS?

- ✓ Facilitate parking and traffic by equipping police and TMC with ITS tools.
 - ✓ Expand event management partnership with police, traffic and stadium/center management

Downtown Phoenix Major Facilities



Bank One Ballpark: Seating Capacity 53,000



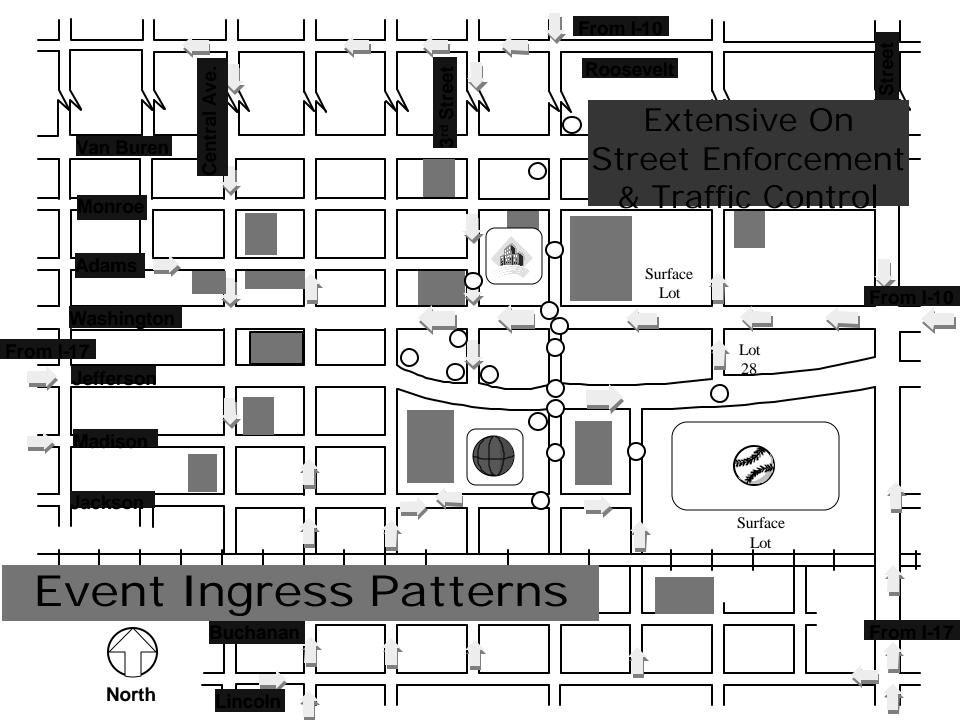


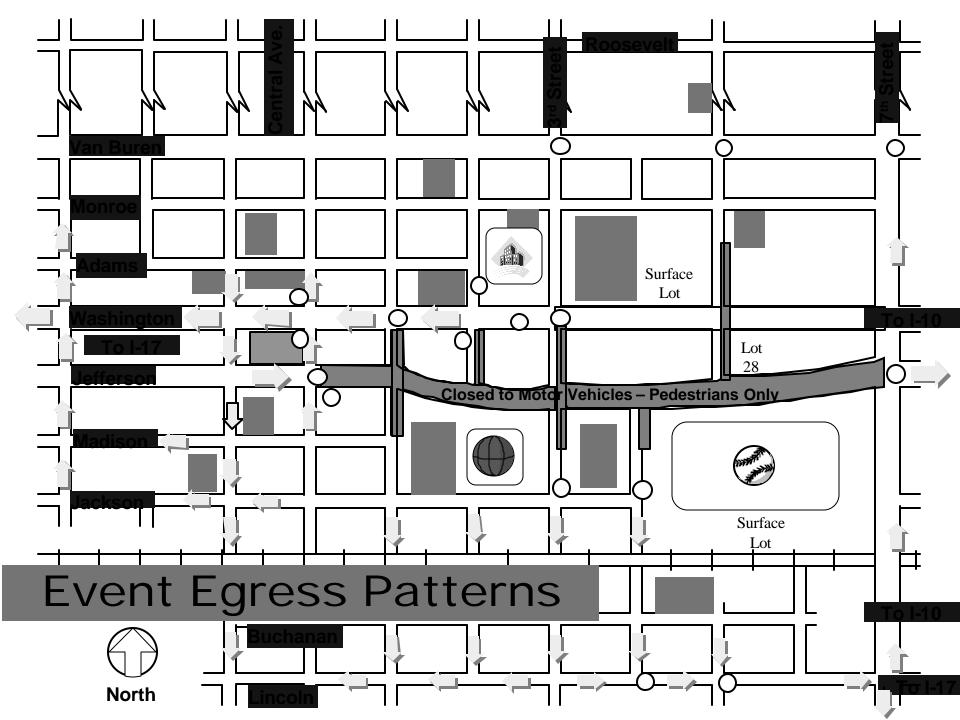


America West Arena: Seating Capacity 19,023

Event Traffic Management & Enforcement Needs

- Enhance event ingress & egress
- Enhance event security
- Enhance interagency coordination



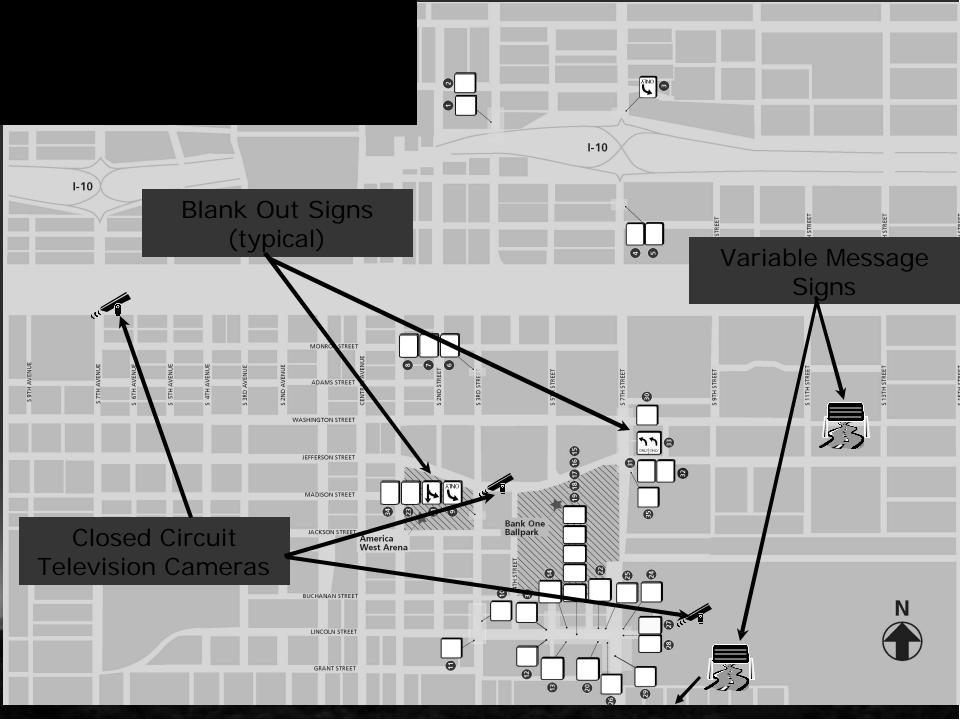


Design & Implementation Process

- Early planning 1999 2000
- Design Concept Report August 2001
- Design Completed August 2001
- CM@R Revised Design Completed March 2003
- Construction & System Acceptance Complete November 2004

What ITS Tools are elements of the DTMS?

- Surveillance
 - > CCTV
- Traveler Information
 - Dynamic Message Signs DMS (Arterial)
- Traffic Management
 - ➤ Blank Out Signs
 - > Traffic Signals
 - > Video Walls
 - > Integrated Central Control Software



Surveillance



Closed Circuit
Television (CCTV)
System:

3 additional cameras (integration of 6 existing)

Shared control for police & traffic management staff

Linkage to freeway CCTV system

Traveler Information



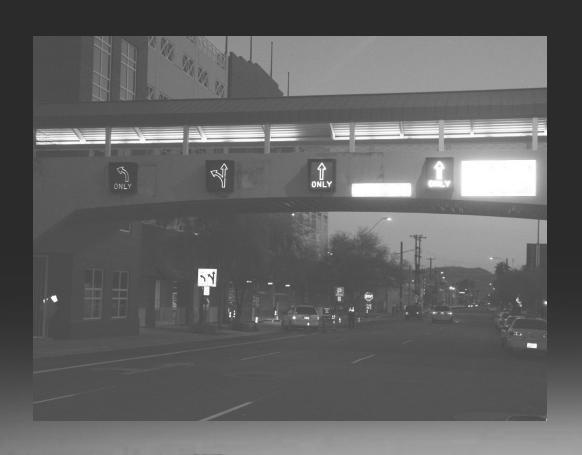
Dynamic Message Signs (DMS):

2 arterial DMS

Shared control for police & traffic management staff

Ongoing test with freeway DMS coordination

Traffic Management



Blank Out Signs:

36 Blank Out Signs

10 Ingress & Egress 'Scenarios'

System tied to traffic signals where turn restrictions apply

Traffic Management



Management Center Enhancements:

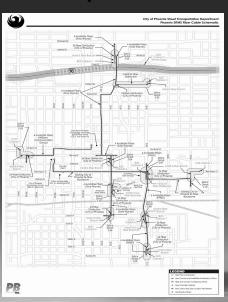
Video Walls at Police and Traffic Management Centers

Integrated Control& MonitoringSoftware (withremote capability)

Communications

Integrated communications mix:

- City owned fiber optic
- City franchised private sector fiber optic
- City owned copper wire
- Leased telephone



What's next

- Operational plan in progress
- Contract maintenance for most field devices (after warranty period)
- Adjust some scenarios & add additional signs
- Tie in to parking garage & signal systems for traffic & parking data
- Coordinate with Light Rail construction & operations
- Evaluate system once ASU Downtown campus opens

Questions



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